# TITLE V PERMIT STATEMENT

Significant Modification to reopen Title V permit to add combustion of propandiol fermentation byproduct to coal fired boilers.

Facility Name: Tate & Lyle Ingredients Americas, Inc.

City: Loudon

County: Loudon

Date Application Received: May 23, 2006:

Date Application Deemed Complete: May 23, 2006

Emission Source Reference No.:53-0081

Permit No.: 548512 (Title V Permit No.)

### INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-3-9-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to Tate & Lyle Ingredients Americas, Inc. and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

## Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

### I. Identification Information

A. Source Description - Tate & Lyle Ingredients Americas, Inc. produces a variety of nutritive corn sweeteners widely used in the food and beverage industries. Tate & Lyle is a major producer of corn based feed ingredients derived from the corn wet milling process. Tate & Lyle produces wet and dry corn gluten feed made from a combination of fiber, screenings, and steepwater. Tate & Lyle produces ethyl alcohol (ethanol) and supplies customers with two grades of ethanol. One grade, denatured ethanol, is primarily used for blending with gasoline for use as motor fuel. The second, an industrial grade ethanol, is used for such varied applications as vinegar production to manufacturing plastics. The emission sources include the following:

# **Installation Description:**

## Wetmill / Feedhouse Area

- 03 Steephouse & Millhouse Aspiration
- 06 Cracked Corn Conveying
- 07 Germ Dryers No. 1 & 2
- 16 Gluten Filter Aspiration, Gluten Dryer, Rotary Feed Dryers #1, #2 and #3, Rotary Feed Cooler, Feed Milling Cyclones, Pellet Cooling
- 17 Gluten Conveying and Gluten Meal Loadout
- 49 Germ Transfer and Unloading
- 64 Germ Dewatering
- 68 Germ Conveyor, Storage & Loadout Bin

### **Elevator Area**

- 01 Corn Unloading Dust Collector
- 02 Elevator Dust /Collector
- 48 Vacuum Cleaning System

## **Refinery Area**

- 23 Carbon Furnace
- 24 Soda Ash Unloading
- 26 Filter Aid Supply System
- 53 HCl System –Bulk & Dilute Acid Tanks
- 66 Jet Foam Trap Exhaust
- 90 Railcar Receiver Bin, Spray Dryer,

Product Bin, Unloading Receiver, Gum Bag Dump, Vacuum Cleaning System

- 91 Bag Packer Facility
- 93 Corn Sweetener Process

# Alcohol Area

- 28 CO2 & Propagators Scrubber
- 54 Denatured Alcohol Storage Tank
- 55 Alcohol Storage & Loadout
- 59 Gasoline Storage Tank
- 98 Alcohol Storage Tank
- 99 Alcohol Barge Loadout Facility

# **Utilities Area**

- 29 Coal Unloading
- 30 Coal Transfer House
- 32 Coal Bunkers
- 34 Coal Fired Boilers and oil/gas boiler
- 39 Ash Handling Silo
- 43 No. 6 fuel Oil Storage Tank
- 44 Dead Coal Pile Storage
- 60 Working Coal Pile Storage
- 71 Emergency Electrical Generation

## B. Facility Classification

- Attainment or Non-Attainment Area Location
  Area is designated as a non-attainment area for ozone.
- 2. Company is located in a Class II area.

## C. Regulatory Status

### 1. PSD/NSR

This facility is a major source under PSD.

2. Title V Major Source Status by Pollutant

		If emitted, what is the facility's status?	
Pollutant	Is the pollutant emitted?	Major Source Status	Non-Major Source Status
PM	Yes	X	
PM <sub>10</sub>	Yes	X	
$SO_2$	Yes	X	
VOC	Yes	X	
$NO_X$	Yes	X	
CO	Yes	X	
Individual HAP	Yes	X	
Total HAPs	Yes	X	

#### 3. MACT Standards

This facility is a major source for HAPs. This facility is subject to final MACT Standards and may be subject to proposed MACT standard.

List MACT Rules if applicable:

40 CFR Part 63 Subpart EEEE - National Emission Standards for Hazardous Air Pollutants Organic Liquids Distribution (Non-gasoline).

4. Program Applicability

Are the following programs applicable to the facility?  $\label{eq:psd} {\tt PSD} \ ({\tt yes})$ 

NESHAP (yes)

NSPS (yes)

5. Title V permit number 548512, issued May 30, 2003, is being reopened to add the combustion of propanediol fermentation byproduct in the coal fired boilers. This permit reopening is pursuant to part 1200-3-9-.02(11)(f)6 of the Tennessee Air Pollution Control Regulations ("reopening for cause" by the Technical Secretary).

## II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements?(yes) If no, explain.

Are there any applicable requirements that will become effective during the permit term?(yes)

If yes, explain.

40 CFR Part 63 Subpart FFFF - National Emission Standards for Hazardous Air Pollutants Miscellaneous Organic Chemical Manufacturing.

## III. Other Requirements

A. Emissions Trading

The facility is involved in an emission trading program. The NOx Budgeting Trading Program administered by EPA through the Clean Air Markets Division (CAMD) is pertinent to the Coal and Oil/Gas Fired Boilers which are listed as emission source 53-0081-34.

B. Acid Rain Requirements

This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases

This facility has a current risk management plan for accidental releases under 112(r) on file with the Tennessee Division of Air Pollution Control.

# IV. Public Participation Procedures

Notification of this draft permit was provided to the following environmental agencies:

- 1. EPA Region IV
- 2. North Carolina
- 3. Knoxville Local Program